

## FOOT POSITION TRAINING DEVICE

### 5 FIELD OF INVENTION

The present invention relates to sports training devices and specifically to a foot position training device suitable for baseball or fast pitch softball.

### 10 BACKGROUND OF THE INVENTION

Children begin learning how to bat a ball almost as soon as they are able to hold a bat. In fact, children begin learning to play the game of baseball as early as kindergarten, usually by hitting a ball off a tee (Tee  
15 Ball). Teaching proper hitting technique, including batting stance, is important at a young age as bad habits may be difficult to correct. A significant problem with young batters is their tendency to move their front foot away from the plate while swinging a  
20 bat. The problem is referred to as "bailing out" or "stepping in a bucket." If the stride is away from the plate, the batter's plate coverage is lost and it is very difficult to make contact with the pitched ball.

Accordingly, there is a need for a training device  
25 that addresses this problem.

### SUMMARY OF THE INVENTION

The present invention meets the above-described need by providing a foot position training device that  
30 provides a visual or audible alarm when the front foot of a batter moves too far away from the plate during the batting stride.

5 BRIEF DESCRIPTION OF THE DRAWINGS

The invention is illustrated in the drawings in which like reference characters designate the same or similar parts throughout the figures of which:

10 Figure 1 is a plan view of the device of the present invention;

Figure 2 is a side elevation view of the device; and

Figure 3 is a block diagram of the control system  
15 for the present invention.

DETAILED DESCRIPTION

In Fig. 1, a foot position training device 10 is shown in position next to a standard home plate 13 for  
20 use in batting practice for baseball or fast pitch softball. The device is shown in position for a left handed batter. In order for use by a right handed batter the device is simply rotated 180 degrees, and moved to the other side of the plate. Typically, a  
25 pitching machine (not shown) will deliver balls across the plate 13 from right to left in the direction of arrow 14 to simulate live pitching. The batter typically hits off of the machine in batting practices where each batter takes turns hitting a succession of  
30 ten to twenty balls delivered to the plate 13 by the machine.

The device 10 includes a substantially planar mat 16 for the batter to stand on. The mat 16 is provided with indicia such as foot diagrams 19 as shown. Other  
35 types of indicia such as lines may also be provided.

5 During the batting stroke, the back foot of the batter  
should remain in the same position except for pivoting.  
With respect to a horizontal axis 22 which is determined  
by the original position of the batter's feet in the  
relaxed state, the movement of the front foot of the  
10 batter should be in a plane either parallel to the back  
foot as shown in broken lines in the diagram or inward  
toward the plate 13.

An electric eye is established behind the feet of  
the batter such that a transmitter 25 and receiver 28  
15 are aligned to transmit a beam 31 extending  
approximately parallel to axis 22. If the batter moves  
his or her front foot too far away from the plate 13,  
the beam 31 is broken and an alarm 33 is triggered by  
the device 10.

20 As shown in Fig. 2, the transmitter 25 and receiver  
28 may not have to be positioned very high above the mat  
16. Because the device 10 is primarily intended for  
batting practice, the profile of the transmitter 25 and  
receiver 28 is not critical. Accordingly, the height of  
25 the transmitter 25 and receiver 28 may be adjusted. If  
the beam 31 is lower it may detect the foot of the  
batter, and if it is positioned higher it may detect the  
leg of the batter when the stride is too far from the  
plate 13. Also, the mat 16 can be made of suitable  
30 materials such as plastic, rubber, or the like in  
varying sizes with regard to width, length and  
thickness.

Turning to Fig. 3, the device 10 includes a control  
system 34 having a power supply 37. The power supply 37  
35 is a battery, however, other power supplies including,

5 but not limited to, a 110 V AC power supply may also be  
utilized. The control system 34 controls the  
transmitter 25 and receiver 28 and receives input if the  
beam 31 is broken. If the beam 31 is broken, the system  
34 activates the alarm 33. The alarm 33 may be either  
10 audible or visual or both. The audible alarm includes,  
but is not limited to, a beep, a buzzer, or a pre-  
recorded message. The visual alarm includes but is not  
limited to, a light or beacon alarm. Other types of  
alarms capable of alerting the batter or batting  
15 instructor that the beam 31 has been broken would also  
be suitable.

While the invention has been described in  
connection with certain embodiments, it is not intended  
to limit the scope of the invention to the particular  
20 forms set forth, but, on the contrary, it is intended to  
cover such alternatives, modifications, and equivalents  
as may be included within the spirit and scope of the  
invention as defined by the appended claims.